

App. Serial No.: 10/634,421
Atty. Docket No.: 0003-033P1

IN THE CLAIMS

Please amend the claims as follows:

1. (previously presented) A pump for moving a wet product, comprising:
a separating apparatus;
an air pump for providing a vacuum to the separating apparatus sufficient to draw the wet product into the separating apparatus;
a pressure valve apparatus for allowing the wet product to be removed from the separating apparatus; and
a blower capable of blowing the wet product out of the pump.
2. (original) The pump of claim 1, wherein:
the separating apparatus is a cyclonic separator.
3. (canceled)
4. (previously presented) The pump of claim 1, wherein:
the blower is an air pump.
5. (previously presented) The pump of claim 1, wherein:
the air pump and the blower are the same air pump.
6. (previously presented) The pump of claim 1, and further including:
a cooling apparatus for cooling air exiting the blower.
7. (previously presented) The pump of claim 1, and further including:
a demister for removing moisture from air entering the air pump.
8. (original) The pump of claim 1, wherein:
the pressure valve apparatus is a rotary dump valve.

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9. (previously presented) The pump of claim 1, wherein:
the pump is capable of pumping a liquid-solid mixture.
10. (previously presented) The pump of claim 9, wherein:
the liquid-solid mixture is a wine product.
11. (previously presented) The pump of claim 10, wherein:
the wine product is wine must.
12. (previously presented) A wine must pump for pumping a wet wine product, comprising:
a separator for separating the wet wine product from air;
an air pump providing a vacuum sufficient to draw the wet wine product into the
separator;
a valve apparatus for allowing the wet wine product to fall out of the separator into a
depository; and
a blower providing compressed air sufficient to blow the wet wine product out of the
wine must pump.
13. (previously presented) The wine must pump of claim 12, wherein:
the blower is an air pump.
14. (previously presented) The wine must pump of claim 12, wherein:
the air pump and the blower are the same air pump; and
at least some air drawn out of the separator is used to blow the wine product out of the
wine must pump.
15. (previously presented) The wine must pump of claim 12, wherein:
the wine product drops out of the depository into a mixing valve; and
air from the blower blows the wine product out of the mixing valve.

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16. (previously presented) The wine must pump of claim 12, and further including:
a heat exchange apparatus for removing heat from compressed air exiting the blower.
17. (original) The wine must pump of claim 12, and further including:
a demisting apparatus for removing moisture from air exiting the separator.
18. (original) The wine must pump of claim 12, wherein:
the separator is a cyclonic separator.
19. (original) The wine must pump of claim 12, and further including:
an in line silencer for reducing noise caused by air exiting the separator.
20. (previously presented) The wine must pump of claim 12, and further including:
a silencer for reducing noise from the blower.
21. (previously presented) The wine must pump of claim 20, wherein:
the silencer is connected such that air entering the blower goes through the silencer.
22. (previously presented) The wine must pump of claim 20, wherein:
the silencer is connected such that air exiting the blower goes through the silencer.
23. (currently amended) A method for moving a wine product, comprising:
applying a vacuum created by an air pump to a separator to draw the wine product into
the separator;
removing the wine product from the separator into a depository; and
blowing the wine product from the depository using air exiting the air pump.
24. (canceled)
25. (currently amended) The method of ~~claim 24~~ claim 23, wherein:
the air is cooled.

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26. (currently amended) ~~The A method of claim 23, wherein for moving a wine product,~~
comprising:

applying a vacuum to a separator to draw the wine product into the separator;

removing the wine product from the separator into a depository; and

blowing the wine product from the depository; and wherein

the wine product falls from the depository into a mixing valve;

the wine product is mixed with compressed air in the mixing valve; and

the wine product is forced out of the mixing valve by the force of the compressed air.

27. (original) The method of claim 23, wherein:
the wine product is a crushed grape product.

28. (original) The method of claim 23, wherein:
the wine product includes a must.

29. (original) The method of claim 23, wherein:
the wine product includes a pomace.

30. (canceled)

31. (canceled)

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32. (previously presented) A pump for moving a wet product comprising:

- a chamber;
- an inlet port coupled to said chamber to facilitate the flow of said wet product into said chamber;
- an outlet port for discharging said wet product from said pump;
- a vacuum port coupled to said chamber;
- a vacuum source coupled to said vacuum port to provide a negative pressure in said chamber sufficient to draw said wet product into said chamber through said inlet port;
- a pressurized gas source providing pressurized gasses sufficient to push said wet product;

and

- a mixing valve coupled to said chamber, said outlet port, and said pressurized gas source, whereby said wet product can be pushed out said outlet port by said pressurized gas.

33. (previously presented) A pump according to claim 1, further including an inlet valve disposed in the separating apparatus near the pressure valve apparatus, whereby gas entering the separating apparatus via the inlet valve agitates the product to prevent blockage of the pressure valve.

34. (previously presented) A pump according to claim 12, further including an inlet valve disposed in the separator near the valve apparatus, whereby gas entering the separator via the inlet valve agitates the product to prevent blockage of the valve apparatus.

35. (currently amended) A method ~~according to Claim 23, further for moving a wine~~ product, comprising

- applying a vacuum to a separator to draw the wine product into the separator;
- removing the wine product from the separator into a depository;
- blowing the wine product from the depository; and
- agitating the wine product in the separator to prevent clogging during the step of removing the wine product from the separator.

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36. (previously presented) The pump of claim 1, wherein the air pump has a power rating of at least 40 horsepower.

37. (previously presented) The pump of claim 12, wherein the air pump has a power rating of at least 40 horsepower.